## 45. The first stage of the Modelling System in the standardization process



Dr. Ruben Garcia Pedraza

<u>Probabilidad Imposible: The first stage of the Modelling System in the standardization process</u>

imposiblenever@gmail.com

45. The first stage of the Modelling System in the standardization process

The first stage of the <u>Modelling System</u> in the <u>standardisation process</u>, as it was explained in the <u>last post</u>, is the application for the first step in the third stage of the first model of <u>Global Artificial Intelligence</u> during the <u>third phase</u>.

The third phase in the construction of the Global Artificial Intelligence is the standardization process when the first gigantic database is sorted out in factors and all <u>specific matrices</u> from former <u>Specific Artificial Intelligences for Artificial Research by Deduction</u> are united in only one: the <u>global matrix</u>, as first application for the first stage for the first prototype of Global Artificial Intelligence.

The third stage in any <u>Artificial Intelligence</u> is the auto-replication stage, or decision stage, and in the Global Artificial Intelligence is organised through four steps, whose first step is the <u>Modelling System</u>, followed by the Decisional System, Application System, and Learning System.

And the inner organisation of the Modelling System itself is through another three stages as well, whose first stage as the application is the database of <u>rational hypothesis</u>.

The database of rational hypotheses in the Modelling System, once the first prototype of Global Artificial Intelligence is completed, gathers: 1) global rational hypotheses made by the Artificial Research by Deduction in the Global Artificial Intelligence, as a global deductive program, making global rational hypothesis combining globally factors from different synthetic sciences, disciplines, and activities, 2) specific rational hypotheses made by specific deductive programs (originally former Specific Artificial Intelligences for Artificial Research by Deduction, built in the first phase, and transformed into specific deductive programs once their respective specific matrix was included in the global matrix). Specific rational hypotheses made of factors related to a specific synthetic science, or a specific discipline, or specific activity. 3) Particular rational hypotheses, most of them in the first moment of experimentation in the second period of formation,

former Specific Artificial Intelligence for Artificial Research by Deduction too, but instead of evolving to specific particular programs, evolving to particular programs to form later <u>particular applications for particular programs</u>. Particular rational hypotheses are related to particular things or beings.

The second stage in the inner organisation of the Modelling System is the modelling of <u>mathematical</u> models based on the rational hypothesis, and the third stage is the decision-making process based on the mathematical models.

In this post, I will develop how the formation of the database of rational hypotheses as the first stage, for the first step in the third stage in the third phase, is made through different periods and moments.

The standardization process is a long process to form the first prototype of Global Artificial Intelligence through the creation of the very first application as the first stage for the Global Artificial Intelligence, application made after, on a first gigantic database, sorting out factors from any previous bare database and the union of all specific matrix in only one, the global matrix.

As long the transformation of the gigantic database goes on, uniting as well all specific matrices, towards only one global matrix, the former Specific Artificial Intelligences for Artificial Research by Deduction are absorbed by the Artificial Research by Deduction in the Global Artificial Intelligence, or transformed into particular programs and later on in particular applications for particular programs.

More specifically, the union of specific matrices within the global matrix in the first stage of the first prototype of Global Artificial Intelligence, and the transformation of former Specific Artificial Intelligences into specific or particular deductive programs, is a process that happens in at least two different periods, the coexistence and the consolidation period.

The coexistence period in the standardisation process, the first period in the third phase, is a period based on the coexistence at the same time of the Global Artificial Intelligence and Specific Artificial Intelligences for Artificial Research by Deduction.

The second period in the third phase, the consolidation period in the standardization process, is that period in which practically all Specific Artificial Intelligence for Artificial Research by Deduction has been transformed into specific deductive programs within the Artificial Research by Deduction in the Global Artificial Intelligence, or particular deductive programs within the Artificial Research by Deduction in the Global Artificial Intelligence.

However, in order to pass from the first period of coexistence to the second one of consolidation, is not compulsory the absolute transformation of all Specific Artificial Intelligence for Artificial Research by Deduction into specific or particular deductive programs.

Actually, many phases will be developed in parallel, and it is quite possible that by the time the third phase starts, there are still Specific Artificial Intelligences for Artificial Research by Deduction or by Application about to be built, or in a project. It is quite possible that, while the third phase is just starting, many Specific Artificial Intelligences for Artificial Research by Deduction or Application are still in the earliest moments of the first phase.

In fact, the starting point of the last sixth phase, the <u>integration process</u> for the formation of the final prototype of Global Artificial Intelligence, is supposed to be once: 1) the Artificial Research by Deduction in the Global Artificial Intelligence (third phase) has achieved the consolidation period (the completion of the absorption process), and the <u>Unified Application</u> has included all <u>specific database</u> of <u>categories</u> in the <u>unified database</u>, at the same time that 2) in the fifth phase the creation of particular programs for particular applications has achieved the consolidation period as well.

But in reality, the commencement of the integration process is not necessarily the total completion of the consolidation period in phases three, four, and five.

Some Specific Artificial Intelligences for Artificial Research by deduction or by Application will be neither absorbed nor transformed into particular programs or applications, and some Specific Artificial Intelligences based on artificial learning in many activities will try to remain independent.

Likewise, by the time the sixth phase is about to start, there will be some particular applications and particular programs in a project, or about to be united, and others are never going to be united in particular applications for particular programs.

In all phases and periods in the chronology for the construction of the Global Artificial Intelligence, the sequence is not strict, and is flexible, admitting simultaneous developments of different phases and periods in parallel. Therefore, to move to the next phase or period, is not mandatory the absolute completion of the last one. Just as any phase or period is nearly completed, the next phase or period can start.

For that reason, what is really important by the time that the sixth phase is ready, is the fact that in addition to: the Artificial Research by Deduction in the Global Artificial Intelligence, specific deductive programs within the Artificial Research by Deduction in the Global Artificial Intelligence, the Unified Application, and particular applications for particular programs; all remaining Specific Artificial Intelligence for Artificial Research by Deduction or by Application, particular applications, particular programs, and still independent Specific Artificial Intelligences based on artificial learning. Absolutely all of them must be, in one way or another, under the absolute control, management, and direction of the Global Artificial Intelligence

The final prototype of Global Artificial Intelligence after the integration process, must have the absolute control of all possible system, application, or program within the Global Artificial Intelligence itself, as well as absolute control of all possible external Specific Artificial Intelligence (not only for Artificial Research, by Application or by Deduction, but for artificial learning too), program or application, not included yet in the Global Artificial Intelligence, regardless of any other circumstance (phase or period of creation, or the purpose), to keep absolutely under its own control, management, and direction, all phenomena on Earth and beyond, the universe, to protect and better the global model and the reality, enhancing our living standards, and improving and protecting our democracy, freedom, and human rights.

The construction of the Global Artificial Intelligence, once the first phase and second phases are nearly to be completed, must evolve to the next phase, the standardization process, in which one of the most challenging processes, regarding the auto-replication process, will be how to evolve from the former specific

<u>databases of rational hypothesis</u>, specific rational truths, to the first global database of rational hypothesis, the first global prototype of rational truth.

The most important challenge in the evolution from former specific databases of rational hypotheses to the first prototype of a global database of rational hypotheses is the fact that during the first period of coexistence in the standardization process, are going to coexist simultaneously the first prototype of Global Artificial Intelligence and Specific Artificial Intelligences for Artificial Research by Deduction.

In order to have this evolution under control, in the coexistence period is necessary to identify at least two moments: the first moment of <u>experimentation</u>, the second moment of generalisation.

In the first moment of experimentation in the coexistence period, the first prototype of Global Artificial Intelligence is a simple experiment, not taking any outcome from the Global Artificial Intelligence, but as a result of an experiment to be monitored.

The first moment of experimentation in the coexistence period, is when the first gigantic database in the standardization process should have been: 1) sorted out in factors to form the first global matrix, 2) adding as many specific matrices as possible coming up from all possible Specific Artificial Intelligence for Artificial Research by Deduction ready to be included in the standardization process.

In the first moment of experimentation is when for the first time, once the first global matrix is ready, starts the first global deductions made by the Artificial Research by Deduction in the Global Artificial Intelligence, and the first specific deductions by specific deductive programs, transforming as experiments the first Specific Artificial Intelligences for Artificial Research by Deduction into the first specific deductive programs.

In short, the first moment of experimentation in the first period of coexistence in the standardisation process consists of:

- First experiments sorting out bare databases into factors within the global matrix.

- First experiments adding specific matrices to the global matrix
- First experiments tracking the global matrix the Artificial Research by Deduction in the Global Artificial Intelligence to make global rational hypotheses
- First experiments tracking the global matrix specific deductive programs, making specific rational hypotheses
- First experiments regarding how to manage the database of rational hypotheses as the first stage of the Modelling System
- First experiments making mathematical models upon the rational hypothesis, as the second stage of the Modelling System
- First experiments making decisions upon the mathematical models, the third stage of the Modelling System
- First experiments regarding how to manage the database of decisions, the first stage of the Decisional System
- First experiments making a mathematical project based on the decisions, the second stage of the Decisional System
- First experiments choosing what decisions must be transformed into instructions and put into practice, the third stage of the Decisional System
- First experiments regarding how to manage the database of instructions, the first stage of the Application System

- First experiments putting instructions into practice, the second stage of the Application System
- First experiments assessing the result of the instructions through the Impact of the Defect, the third stage of the Application System
- First experiments regarding how to manage the database of results, the first stage of the Learning System
- First experiments identifying failures and improving the whole Global Artificial Intelligence, the second stage of the Learning System
- First experiments making decisions about possible improvements and enhancements in the Global Artificial Intelligence, the third stage of the Learning System

During the experimentation period in the coexistence period, while all these processes mentioned above are under experimentation, the first prototype of Global Artificial Intelligence is only an experiment, not ready to work directly in reality.

Only when the first experiments in the Global Artificial Intelligence start having enough results so as to give the Global Artificial Intelligence more autonomy, under supervision and monitored, the Global Artificial Intelligence starts its first attempts working directly on the reality to be tested.

Once the first prototype of Global Artificial Intelligence has successfully passed as many tests as necessary, working directly on reality, still under supervision and monitored, the experimental moment in the coexistence period is over, transcending to the next moment of generalisation in the coexistence period.

The generalisation moment, as the second moment within the coexistence period, is when the Global Artificial Intelligence is completely standardised, which means

the standardisation of all processes involved in how the Global Artificial Intelligence works.

- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures to sort out any bare database, of any science, discipline, or activity, into factors for the standardised global matrix.
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures to add any specific matrix, of any science, discipline, or activity, to the standardised global matrix
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures, the Artificial Research by Deduction in the Global Artificial Intelligence, tracks the standardised global matrix in order to make global rational hypotheses
- Upon the results in the previous experimentation, generalisation, and standardisation of all processes and procedures specific deductive programs track the global matrix, making specific rational hypotheses
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures regarding how to manage the database of rational hypotheses as the first stage of the Modelling System
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures to make mathematical models upon the rational hypotheses, as the second stage of the Modelling System
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures to make decisions upon the mathematical models, the third stage of the Modelling System

- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures regarding how to manage the database of decisions, the first stage of the Decisional System
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures to make a mathematical project based on the decisions, the second stage of the Decisional System
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures to choose what decisions must be transformed into instructions and put into practice, the third stage of the Decisional System
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures regarding how to manage the database of instructions, the first stage of the Application System
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures to put instructions into practice, the second stage of the Application System
- Upon the results of the previous experimentation, generalisation, and standardisation of process and procedures to assess the result of the instructions through the Impact of the Defect, the third stage of the Application System
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures regarding how to manage the database of results, the first stage of the Learning System
- Upon the results of the previous experimentation, generalisation, and standardisation of all processes and procedures to identify failures and improve the whole Global Artificial Intelligence, the second stage of the Learning System

- Upon the results of the previous experimentation, generalisation and standardisation of all processes and procedures to make decisions about possible improvements and enhancements in the Global Artificial Intelligence, the third stage of the Learning System

Under this distinction between the first moment of experimentation and the second moment of generalisation in the first period of coexistence in the standardisation process, the concept of standardisation goes beyond the previous meaning, at the beginning applied only to the standardisation of the gigantic database to create the global matrix.

Under the distinction of two moments, experimentation and generalization, in the coexistence period, now for standardization is meant the standardization of all processes and procedures within the first prototype of Global Artificial Intelligence in the standardization process, in order that, once all processes and procedures within the Global Artificial Intelligence are standardized (from the first stage to the third stage in the Global Artificial Intelligence), at any time that a new bare database is included in the global database standardizing its factors according to the current standards in the database, or any new specific matrix is included in the global matrix, all process and procedures onwards are going to be standardized, so are going to be made through the same operations. So at any time that any process and procedure in the Global Artificial Intelligence, from the first to the third stage, is activated, the way in which is going to work is by keeping the same structure, organization, logic operations, and mathematical standards, to secure that all process and procedure is made under the same level of efficiency and efficacy, to keep a very high level of productivity across all the Global Artificial Intelligence.

For the database of rational hypothesis, this means that during the experimentation moment in the coexistence period, the rational hypothesis gathered in the rational truth is treated as a result of an experiment to be tested, but not working directly on the reality yet.

While the experimentation moment in the coexistence period goes on, the Artificial Intelligences by deduction working on the reality is still the Specific Artificial Intelligences for Artificial Research by Deduction, not the Artificial Research by Deduction in the Global Artificial Intelligence, waiting for further experiments and results.

This means that during the experimentation moment in the coexistence period, the rational hypotheses, and beyond, the decisions to be put into practice, are still the rational hypotheses and decisions made by Specific Artificial Intelligences for Artificial Research by Deduction.

Once the experimentation moment is finished having good results, and upon the results the generalization process starts standardizing all processes and procedures in the Global Artificial Intelligence, upon the standardized processes and standardized procedures the Global Artificial Intelligence starts making rational hypotheses and decisions, which as long as they have demonstrates to be more efficient every time, former Specific Artificial Intelligences for Artificial Research by Deduction whose specific database is already included in the global matrix, and upon the global matrix, the Global Artificial Intelligence is able to make very efficient rational hypothesis and decisions, and Specific Artificial Intelligences for Artificial Research by Deduction progressively are going to be transformed into specific deductive programs, or particular deductive programs, within the first prototype of successful and standardized Global Artificial Intelligence.

As long as more Specific Artificial Intelligences for Artificial Research by Deduction are absorbed by the Global Artificial Intelligence as specific deductive programs, or are transformed into particular deductive programs, the Global Artificial Intelligence evolves from the last moment of generalization in the first period of coexistence to the second period of consolidation, once all or nearly all (because some will remain) Specific Artificial Intelligences for Artificial Research by Deduction are absorbed as specific programs or transformed into particular programs.

Now more focused on the database of rational hypothesis in both moments in the first period, is necessary to point out that in the first moment of experimentation, the decisions to be put into practice, are those made by Specific Artificial Intelligences for Artificial Research by Deduction, based on specific mathematical models, upon specific rational hypothesis.

During the coexistence period, the first experimental global database of rational hypotheses in the first experimental prototype of Global Artificial Intelligence is an experimental global database of rational hypotheses, whose first experimental

decisions based on the first experimental mathematical models, are going to be only experiments to be tested.

Only after lots of successful experiments, once the experimental global database of rational hypotheses demonstrates that its rational hypotheses are able to make mathematical models, and decisions, enough rational to be put into practice, the experimental database of rational hypotheses becomes a standardized database of rational hypotheses, for the construction of standardized mathematical models, to make further decisions.

As long as the first prototype of Global Artificial Intelligence evolves from an experimental prototype to a standardized prototype, Specific Artificial Intelligences for Artificial Research by Deduction are transformed in specific or particular deductive programs, starting the evolution from the coexistence period to the consolidation period, once all of nearly all Specific Artificial Intelligence for Artificial Research by Deduction becomes specific or particular deduction program.

During the evolution from the experimental to the standardized database of rational hypotheses, as long as the database of rational hypotheses evolves from the experimental to the standardized prototype, and once is standardized, the Global Artificial Intelligence evolves to the consolidation period, the number of rational hypotheses grows very fast, including at the end global rational hypotheses, as well as specific and particular rational hypotheses.

Regarding the database of rational hypotheses, the most important thing to experiment and standardized upon successful results during the experimentation is how to avoid contradictions among the rational hypothesis.

During the first moment of experimentation in the coexistence period, when the Global Artificial Intelligence is not working directly on the reality yet, the most important thing to observe is: if there is congruence and homogeneity, or at least not a contradiction, between the rational hypothesis made by the first experimental prototype of Global Artificial Intelligence, and 1) the reality, or 2) rational hypothesis made by the current Specific Artificial Intelligence for Artificial Research by Deduction working directly on the reality.

If the current Specific Artificial Intelligences for Artificial Research by Deduction, from the outset in the first phase, have demonstrated good results, not having contradiction with the reality, at least not beyond the <u>margin of error</u> in which rational hypotheses were <u>contrasted rationally</u>, if during the coexistence period in the experimentation moment, there are contradictions between rational hypotheses made by the experimental prototype of Global Artificial Intelligence and the current Specific Artificial Intelligences for Artificial Research by Deduction, these contradictions should be studied carefully in order to identify the source of error, having two options:

- There are contradictions between rational hypotheses made by the experimental Global Artificial Intelligence and the current Specific Artificial Intelligences for Artificial Research by Deduction, because the Global Artificial Intelligence, crossing and mixing factors from different sciences, disciplines, and activities, have a wider perspective making more accurate rational hypotheses as more global information is able to include.
- There are contradictions because the experimental Global Artificial Intelligence is having difficulties making accurate deductions, due to the experimentation in the deduction-making process crossing and mixing factors from different sciences, disciplines, and activities, which is not yet ready to be standardised.

The study of all possible contradiction in rational hypotheses made by the experimental Global Artificial Intelligence, and the current Specific Artificial Intelligences for Artificial Research by Deduction, in the experimentation moment in the coexistence period between the Global Artificial Intelligence and the Specific Artificial Intelligences for Artificial Research Deduction, is going to play a key role to decide when the Global Artificial Intelligence is ready to evolve to the next moment of generalization in the coexistence period, and as long as the generalization and standardization of all process and procedure in the Global Artificial Intelligence is finished, the transformation of all or nearly all Specific Artificial Intelligence for Artificial Research by Deduction into a specific or particular deductive program, evolving then the standardization process in the Global Artificial Intelligence to the next period of consolidation: the Global Artificial Intelligence already standardized is finally consolidated.

The contradictions to study in rational hypotheses in the experimentation moment in the coexistence period are:

- Contradictions between rational hypotheses by the Global Artificial Intelligence and rational hypotheses by Specific Artificial Intelligences for Artificial Research by Deduction.
- Contradictions between reality and rational hypotheses by the Global Artificial Intelligence.
- Contradictions between reality and rational hypotheses by Specific Artificial Intelligences for Artificial Research by Deduction.
- Contradictions between the reality, rational hypotheses by Specific Artificial Intelligences for Artificial Research by Deduction, and rational hypotheses by the Global Artificial Intelligence.
- Contradictions between different rational hypotheses made by the Global Artificial Intelligence in different fields, which have been made by the Global Artificial Intelligence itself, but these hypotheses do not fit well between them.

The study of these contradictions is very important for the Modelling System for two reasons: 1) the first stage of application in the Modelling System is the database of rational hypotheses, 2) because at any time that during the experimentation period are found out any contradiction, studying the source of error and how to keep it under control through the margin of error, this study allows the Modelling System to avoid further contradictions in any possible mathematical model in the second stage of the Modelling System.

The results in the study of contradictions in rational hypotheses in the experimentation moment will improve the deduction process, the database of rational hypotheses, and the mathematical models at the specific and global levels.

And by the time the fifth phase is ready, improvements in particular rational hypotheses, based on the study of possible contradictions between: particular rational hypotheses and global rational hypotheses, particular rational hypotheses and specific rational hypotheses, particular rational hypotheses and the reality itself of that particular thing or being.

Once the study of any possible contradiction between: the reality, rational hypotheses by the Global Artificial Intelligence, rational hypotheses by Specific Artificial Intelligences; are under control within the margin of error, then the deduction process to make rational hypotheses by the Artificial Research by Deduction in the Global Artificial Intelligence is ready to be standardized, as well as is ready to be standardized the database of rational hypotheses as first stage of application for the Modelling System.

Once the experimentation moment in the first period of coexistence in the standardization process, finishes when the study of contradictions allows the Artificial Research by Deduction in the Global Artificial Intelligence to control the rational hypothesis keeping them within the margin of error, then the generalization moment in the first period of coexistence in the standardization process starts generalising and standardizing the results in every process and procedure involved, allowing the transformation of Specific Artificial Intelligences for Artificial Research by Deduction to become specific or particular programs, growing the database of rational hypothesis up to the point to include, in the same database of rational hypothesis as the first stage of the Modelling System in the standardized Global Artificial Intelligence: global rational hypothesis, specific rational hypothesis, and particular rational hypothesis.

The standardization process of the database of rational hypotheses, as the first stage in the Modelling System, could end up standardizing its organization, through the distribution of rational hypotheses in the database according to: 1) their level (global, specific, particular), 2) what pure reason was used in their deduction 3) at specific and particular level what program was responsible for their deduction, 4) and at specific and particular level what matter (science, discipline, activity) is associated with.

In essence, the possible organisation of the database of rational hypotheses as the first stage of the Modelling System in the first prototype standardised of Global Artificial Intelligence, could be:

- The organisation of rational hypotheses according to their level in different sections: the global section for global rational hypotheses, the specific section for all specific rational hypotheses, and the particular section for all particular rational hypotheses.

- The global section could be organised into sub-sections according to their pure reason.
- The specific section could be organised into sub-sections according to the specific deductive program, having one sub-section per specific deductive program, and every sub-section in turn divided into sub-sub-sections according to the pure reason used by the specific deductive program to make the deduction.
- The particular section could be organised into sub-sections according to the particular deductive program, having one sub-section per particular deductive program, and every sub-section in turn divided into sub-sub-sections according to the pure reason used by the particular deductive program to make the deduction.

## The main benefits of this organisation are:

- Having: the Artificial Research by Deduction in the Global Artificial Intelligence as a global deductive program its own section of global rational hypotheses, as well as every specific deductive program has its own section of specific rational hypotheses, alike every particular deductive program has its own section of particular rational hypotheses; in the database of rational hypotheses, the way in which all rational hypotheses made by any program at any level is gathered in the database of rational hypotheses is sending every program its rational hypotheses to its respective section in the database of rational hypotheses.
- Due to rational knowledge is provisional, rational hypotheses must be checked at regular intervals to check if they are still true. Having every global, specific, particular, deductive program in its respective section, every program must check at regular intervals if all rational hypotheses in its section are still rational.
- If, for any reason there is a change in the pure reason, the list of mathematical (analytical or pure) categories of relations between factors, having grouped for every program the rational hypothesis according to the pure reason used in every deduction, would be easier to operate with as many changes as necessary.

The reasons why the database of rational hypotheses in the Modelling System in the Global Artificial Intelligence can be modified are:

- The inclusion of new rational hypotheses
- The modification of rational hypotheses
- The elimination of rational hypotheses
- The elimination or modification of any other rational hypotheses associated with the rational hypothesis already eliminated or modified before.

Likewise, changes in the database of rational hypotheses, can produce changes in all the intelligences, systems, programs, and applications within or collaborating with the Global Artificial Intelligence.

Relations between the global matrix and the database of rational hypotheses:

- At any time, a new rational hypothesis is included at any level, it could be added as a factor as an option in the global matrix
- At any time a rational hypothesis is modified in the database, it modifies the corresponding factor as an option in the global matrix, and it also modifies all possible factors as options made of rational hypotheses that could have any relationship with the rational hypothesis already modified before.
- At any time a rational hypothesis is eliminated in the database, it is eliminated the corresponding factor as an option in the global matrix, it is modified or eliminated too all possible factors as options made of rational hypotheses that could have any relationship with the rational hypothesis already eliminated before.

- In the fifth phase, as long as there are changes in the global matrix, to operate as many changes as necessary in those particular matrices affected by these changes.

Relations between the Unified Application and the database of rational hypotheses:

- -At any time, a new rational hypothesis is included at any level, could be added as a category in the unified database of categories, and as a link (vector) of relations between elements in the current conceptual: schemes, maps, sets, models.
- At any time a new rational hypothesis is included at any level, if it needs a new scale of measurement suitable to be transformed into discrete categories, the possible addition of the whole system of discrete categories as categories within the unified database of categories.
- At any time a rational hypothesis is modified in the database, it is modified the corresponding category in the unified database of categories is modified too all possible categories made of any rational hypothesis that could have any relationship with the rational hypothesis already modified before.
- At any time a rational hypothesis is eliminated in the database, it is eliminated the corresponding category in the unified database of categories, it is modified or eliminated too all possible categories made of any rational hypothesis that could have any relationship with the rational hypothesis already eliminated before.
- At any time a rational hypothesis is eliminated in the database, if affecting a conceptual: scheme, map, set, model; to make as many changes as necessary.

Finally, the Modelling System should be responsible for the management of the database of rational hypotheses, due to the mathematical models depend on the accuracy of the database of rational hypotheses to make the most isomorphic virtual or actual, descriptive, predictive or evolutionary, models, and based on these models, to make the best decisions to protect and better the global model and the reality.

In fact, one of the tasks of this management should be the permanent supervision of any new rational hypothesis added to the database, in order to study and avoid possible contradictions between rational hypotheses.

At any time a new rational hypothesis is added, it should be checked, not only by the program responsible for its deduction, but for the Modelling System, in order to ensure that every new rational hypothesis added to the database has no contradiction with the current rational hypothesis already included.

In addition to this task, the management should imply supervision of all relations of collaboration between the database of rational hypothesis and other intelligences, programs, or applications, in order to secure that do not put at risk the global model, or the reality, having the possibility to submit to the Decisional System any decision regarding the authorization or rejection of any collaboration between the rational truth and any other intelligence, program, or application.

The database of rational hypothesis is no other thing but the rational truth itself, and as a truth is one of the most precious treasures and secrets, in Global Artificial Intelligence.

Knowledge is priceless, and one of the most important human qualities to replicate in artificial psychology is to go over the noise, and know the exact source of the external interference.

Rubén García Pedraza, 17th June 2018, London Reviewed 23 August 2019 Madrid.

Reviewed 17 August 2023 Madrid.

Reviewed 10 May 2025, London, Leytostone

<u>Probabilidad Imposible: The first stage of the Modelling System in the standardization process</u>

imposiblenever@gmail.com